

REMARKS

Claims 1-25 are pending. Of these, claims 1, 14, 20-21 and 24-25 are written in independent format.

§ 102 REJECTION – KINJO '208 PATENT

Beginning on page 2 of the Office Action, claims 20-23 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,631,208 to Kinjo et al. ("the Kinjo '208 patent"). This rejection is traversed.

The Kinjo '208 patent is directed to a digital laboratory system 10 (see FIG 1) for performing red-eye correction upon digital images. FIG 1 depicts a line CCD 30 included within a line CCD scanner 14. The output of line CCD 30 is converted from analog to digital by A/D converter 32, with the output of A/D converter 32 representing the output of line CCD scanner 14.

Not much is written in the Kinjo '208 patent regarding CCD 30; most is found in column 11, lines 12-22, which states:

The line CCD 30 incorporates sensing portions each having a plurality of CCD cells disposed in a line in the direction of the width of the photographic film 68 which is moved. Each sensing portion has an electronic shutter mechanism. Three parallel lines of the sensing portions are disposed apart from one another. Any one of R, G and B color decomposing filters is joined to the light incident portion of each sensing portion (that is, a so-called three-line color CCD is constituted) The line CCD 30 is disposed such that the light receiving surface of each of its sensing portion is disposed at the focusing position of the lens unit 76.

Without evidence to the contrary, it is reasonable only to infer that line CCD 30 is conventional. Accordingly, if line CCD 30 were to be read (i.e., if output were to be generated by line CCD 30), then all pixels of line CCD 30 would be read/output. That is, it is impossible for less than all of the pixels of line CCD 30 to be read from (output by) line CCD 30.

A distinction over the Kinjo '208 patent of independent claim 20 is a pixel-differentiated CCD architecture comprising non-sampling arrays that include a first type of photosensor, and a second plurality of sampling arrays that include the first type of photosensor and a second type of photosensor. The Kinjo '208 patent is silent regarding what type of pixel is used in CCD 30 and whether CCD 30 might include more than one type of pixel.

Even assuming for the sake of discussion that the Kinjo '208 patent disclosed more than one type of pixel in CCD 30, a further distinction over the Kinjo '208 patent of claim 20 is that each sampling array is arranged so that sample-information from the second type photosensor can be transferred out of the sampling array without the sample-information having to be conveyed via any of the first type photosensors in the sampling array. Again, the Kinjo '208 patent is silent regarding whether CCD 30 might include more than one type of pixel, and hence all the more is silent regarding transferring sample-information from a second type photosensor out of the sampling array without the sample-information having to be conveyed via any of a first type photosensors in the sampling array.

A distinction over the Kinjo '208 patent of independent claim 21 is read circuitry controllable to respectively read one or more of second type pixels independently of reading first type pixels, the read-circuitry not being controllable to read all of the pixels individually. Again, it is not possible to selectively read fewer than all pixels available at the output of line CCC 30, rather all pixels of line CCD 30 must be read at the same time.

Claims 22-23 depend at least indirectly from claim 21, respectively, and thus at least similarly distinguish over the Kinjo '208 patent.

Returning to the Kinjo '208 patent, the output of CCD line sensor 14 is a complete digital image, i.e., is a digitized version of analog data produced when line CCD 30 is read (recalling that line CCD 30 cannot be read so as to output less than all of its pixels). That complete digital image is provided to an image processing system

16 that includes, among other things, data processing section 200 and red-eye processing sections 220 and 222. Data processing section 200 performs processes such as darkness correction, correction of defective pixels and shading correction upon the complete digital image received from CCD line sensor 14; see column 11, lines 32-36. Red-eye processing sections 220 and 222 operate indirectly upon the corrected complete image data produced by data processing section 200.

The Examiner has directed Applicant's attention to column 18, lines 20-26 of the Kinjo '208 patent. It appears that the Examiner interprets this passage as a teaching that member pixels of a subset of pixels are individually addressable. Assuming for the sake of discussion that this is a reasonable interpretation, this passage is part of a description of how red-eye processing sections 220 and 222 perform red-eye correction processing. The skilled artisan would have understood that such pixel data corresponds to some version of the corrected complete image data output from data processing section 200. Such data is not data provided at the output of an image sensor.

By failing to disclose each element of the rejected claims, the Kinjo '208 patent cannot be regarded as anticipatory. Hence, the § 102(b) rejection is improper and its withdrawal is requested.

§ 103 REJECTION – SANPEI '715 PGPUB + KINJO '208 PATENT

Beginning on page 4 of the Office Action, claims 1, 3-8, 14, 16-17 and 24-25 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Pre-Grant Publication ("PGPub") No. 2001/0050715 to Sanpei ("the Sanpei '715 PGPub") in view of the Kinjo '208 patent. This rejection is traversed.

Applicant will assume for the sake of argument that some portion of the Sanpei '715 PGPub would have been modified according to some portion of the Kinjo '208 patent.

The Examiner acknowledges that independent claims 1, 14, 24 and 25 distinguish over the Sanpei '715 PGPub. However, the Examiner also believes that the

features missing from the Sanpei '715 PGPub are taught by the Kinjo '208 patent, and that the skilled artisan would have adapted the Sanpei '715 PGPub according to the Kinjo '208 patent in a manner rendering the noted claims obvious. Again, Applicant disagrees.

Independent claims 1, 14, 24 and 25 recite features similar to the distinctions over claims 20-21 explained above, respectively, and thus at least similarly distinguish over the Kinjo '208 patent. Such distinctions correspond to the claim features for which the Examiner relies upon the Kinjo '208 patent (in order to make up for shortcomings of the Sanpei '715 PGPub), hence such distinctions also distinguish over the Sanpei '715 PGPub. Claims 3-8 and 16-17 depend at least indirectly from claims 1 and 14, respectively, and thus at least similarly distinguish over each of the Sanpei '715 PGPub, the Kinjo '208 patent and the combination of the two1.

By failing to disclose each element of the rejected claims, the combination of the Sanpei '715 PGPub and the Kinjo '208 patent cannot be regarded as a proper basis for an obviousness rationale. Hence, the §103(a) rejection is improper and its withdrawal is requested.

§ 103 REJECTION – SANPEI '715 PGPUB + KINJO '208 + VARIOUS SECONDARY REFS

Elsewhere, dependent claims are rejected under § 103(a) over the sub-combination of the Sanpei '715 PGPub and the Kinjo '208 patent as further modified according to various tertiary references. More particularly:

- beginning on page 13 of the Office Action, claims 9-12 and 18-19 over the sub-combination and further in view of U.S. Patent No. 6,930,716 to Yoshida ("the Yoshida '716 patent");
- beginning on page 17 of the Office Action, claims 2 and 15 over the sub-combination and further in view of Examiner's Official Notice; and
- beginning on page 18 of the Office Action, claim 13 over the sub-combination and further in view of the Yoshida '716 patent and yet further in

view of U.S. Patent No. 6,930,716 to Yamamoto ("the Yamamoto '614 patent").

Applicant disagrees with the rejections.

Applicant will assume for the sake of argument that some portion of the sub-combination would have been modified according to portions of various tertiary references, respectively.

Claims 2, 9-13, 15 and 18-19 depend from claims 1 and 14, respectively, and thus at least similarly distinguish over the sub-combination of the Sanpei '715 PGPub and the Kinjo '208 patent. None of the tertiary references disclose the respective distinctions over the sub-combination. Accordingly, 2, 9-13, 15 and 18-19 respectively distinguish over the sub-combination and its various further combinations with the tertiary references, respectively.

By failing to disclose each element of the rejected claims, combinations of the sub-combination and the various tertiary references, respectively, cannot be regarded as a proper basis for an obviousness rationale. Hence, the §103(a) rejections are improper and their withdrawal is requested.

<remainder of page intentionally left blank>

CONCLUSION


The issues raised in the Office Action are considered to be resolved. Accordingly, Applicant again requests a Notice of Allowance.

If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to contact the undersigned.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge any underpayment or non-payment of any fees required under 37 C.F.R. §§ 1.16 or 1.17, or credit any overpayment of such fees, to Deposit Account No. 08-2025, including, in particular, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY & PIERCE, P.L.C.

By: 
Thomas S. Auchterlonie, Reg. No. 37,275
P.O. Box 8910
Reston, VA 20195
(703) 668-8000

TSA/cm:tsa